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Fax Transmittal

To: Fred Wilson From: Gary Bayer
Company: US EPA OXFORD ENVIRONMENTAL, INC.
Fax: 908-906-6182 Pages: 14
Phone: _____ Date: 7/31/97
Re: Cornell- Dubikar CC: _____
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• Comment:

New Sampling Plan

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Background

The Cornell-Dubilier site in South Plainfield is currently being stabilized to remove human and ecological exposure to site contaminants. The major contaminants of concern are PCBs, lead and cadmium. Stabilization will consist of paving areas such as driveways and parking areas, fencing areas of known high concentrations of contaminants, and posting warning signs.

Data Use Objectives

Areas in question are the Able Metro parking area, where moving vans are parked, and an adjoining parking area (Figure 1). The areas may require paving or may be left unpaved, depending on the concentration of contaminants that are found in the soil and gravel. The purpose of this sampling is to determine if the parking areas should be included in the areas to be paved at this site.

Quality Assurance Objectives

Quality assurance objective QA-2¹ has been selected for this activity by the On Scene Coordinator. The analyte identity will be confirmed on all samples by use of an EPA-approved method. Analyte concentration will also be determined by use of an EPA-approved method. Precision and accuracy of the measurements will be determined by use of matrix spike, matrix spike duplicate and field replicate samples.

Approach and Sampling Methodologies

The material to be sampled is soil. Because surface contamination is the concern, samples will be taken from a depth of 0-3 inches. Samples will be taken with dedicated stainless steel spoons. The spoons will be new.

If for any reason, a used sampler is needed, it will be decontaminated in the following manner:

1. Wipe off gross contamination.
2. Alconox wash.
3. potable water rinse
4. 10% nitric acid rinse
5. potable water rinse
6. acetone rinse
7. hexane rinse
8. Deionized or distilled water rinse
9. Air dry
10. Wrap in aluminum foil

¹ Refer to Quality Assurance/Quality Control Guidance for Removal Activities, EPA/540/G-90/004, p. 5, for further details.

Table 1
Field Sampling Summary

Analytical Parameter	Matrix	Container	Preservative	Holding Time	Subtotal Samples	Duplicate Samples	MS/MSD Samples	Total Samples
PCBs	Soil/Gravel	4 ounce glass	cool to 4 degrees Celsius	7 days from sampling to extraction, 40 days from extraction to analysis	12	1	2 (1 MS, 1 MSD)	15
Metals: Lead, Cadmium		4 ounce glass	cool to 4 degrees Celsius	180 days from sampling to analysis	12	1	2 (1 MS, 1 MSD)	15

Note: No rinsate blank is expected because dedicated stainless steel spoons are expected to be used for sampling. If for any reason, dedicated samplers are not used, a rinsate blank will be required. Only distilled, deionized water will be used for rinsate blanks.

Sampling Design

Twelve samples of surface soil will be collected with dedicated stainless steel spoons and analyzed for PCBs, cadmium and lead. Prior to sample collection, gravel, debris and vegetation will be removed from the sampling point. Samples will be collected from 0 to 3 inches deep in the parking areas shown in Figure 1. Samples will be spaced 75 feet apart. The sample locations may be offset slightly if they are blocked by parked vehicles, etc.

Field Notes

Sample locations will be documented by measuring from the fences that surround the areas and sketching distances on a copy of the survey map. An 'as-built' map will be created and supplied with the results of sampling and analysis. If locations must be adjusted in the field, for reasons such as a vehicle blocking a location, the adjustment will be noted in the field log book and reported in the sampling trip report. Appropriate photos will be taken to document samples.

Notes will be recorded in a field log book in such a manner that the activities can be reconstructed by someone other than the author.

The field log book will cover the following :

Project name

Site name and location

Date

Weather

Labor and equipment on site

Visitors

Times of entry and departure

Times of events, such as movement from one sample point to the next

Observations, such as color, texture and moisture of samples

Adjustments made in field, such as moving a sample point, and reasons for the deviation from the plan.

Notes on any photographs taken

Sketches

Sample Labels

Each sample will be labeled completely with the following:

1. Site or project number
2. Sample identification number or name
3. Collection date and time

4. Preservation
5. Analyses required
6. Name of sampler

Chain of Custody

Chain of custody will also be employed in order to track samples from their origin to the laboratory. Every transfer of custody shall be noted from the time a sample is taken until its final disposition.

Analytical Methods

PCBs will be analyzed by extraction, then gas chromatography, using a procedure equal to that described in CLP SOW OLMO3.1 or the most recent revision. Because there are different types of PCBs, quantitation limits can vary. Quantitation limits for different types of PCBs are given in Attachment A. under Arochlor 1016 to Arochlor 1260. QA objective is QA-2.

Metals will be analyzed by digestion, then atomic absorption or plasma emission spectroscopy, using a procedure equal to that described in CLP SOW ILMO4.0 or the most recent revision. Quantitation limits are given in Attachment A.. QA objective is QA-2.

Schedule

The following schedule is proposed.

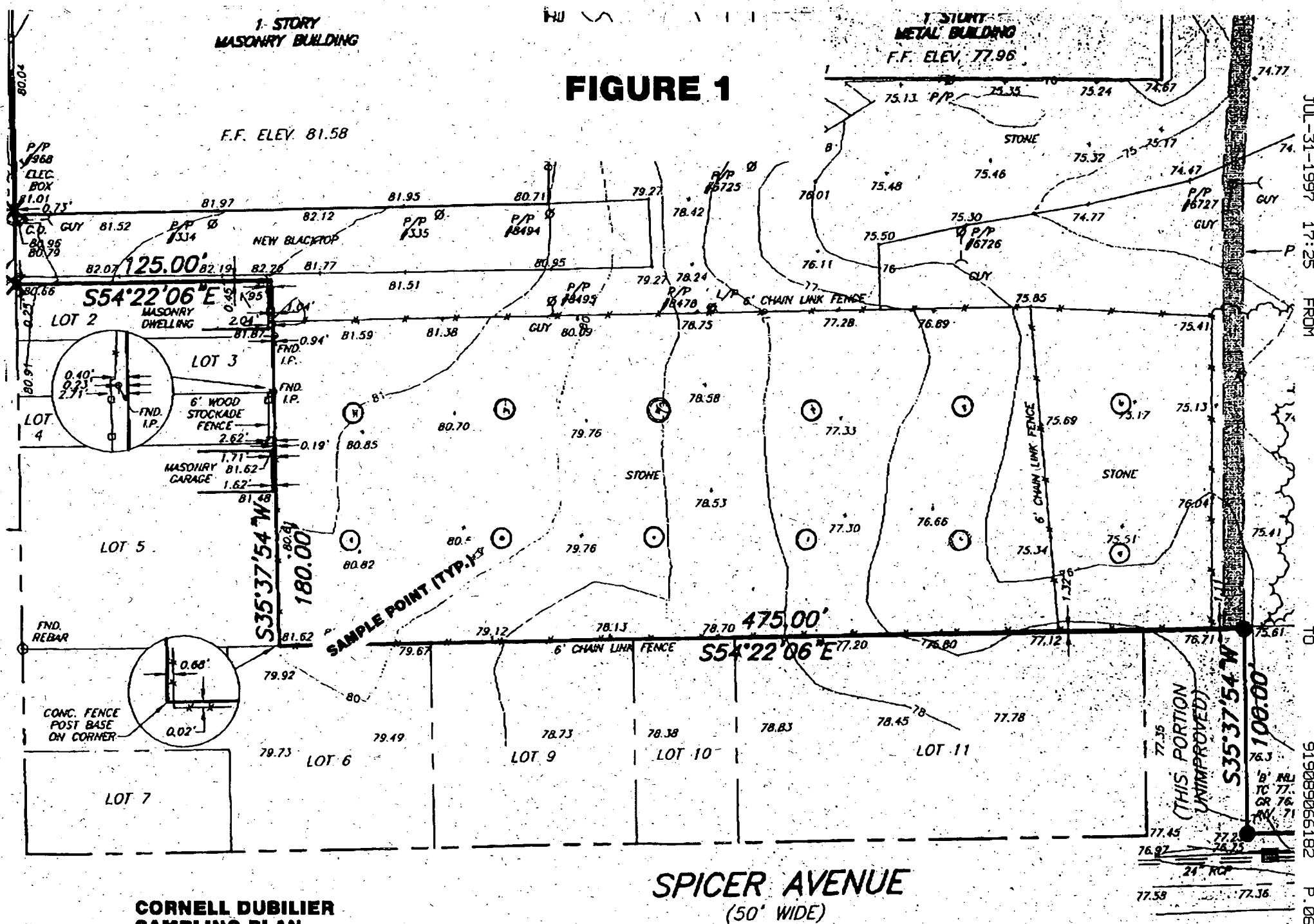
<u>Event</u>	<u>Start</u>	<u>Finish</u>
Sampling	one working day after EPA approval = Day 1	Day 1
Analysis	Day 2	Day 7 (working days)
Trip Report	Day 2	Day 3
Reporting of	Day 7	Day 7
Unvalidated Data		
Reporting of Validated	Day 8	Day 8
Data		

Project Organization and Responsibilities

The following project organization is proposed.

Sampling and Reporting- Oxford Environmental

Personnel	Responsibility
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**CORNELL DUBILIER
SAMPLING PLAN
ABLE METRO PARKING AREA
7/31/97
1"=60'**

SPICER AVENUE
(50' WIDE)

ENUE

Attachment A

TARGET COMPOUND LIST (TCL) AND
QUANTITATION LIMITS (QL) ⁽¹⁾Quantitation Limits ⁽²⁾

Compounds	CAS Number	Quantitation Limits ⁽²⁾	
		Water ug/L	Soil/ Sediment ⁽³⁾ ug/Kg
116. Endrin aldehyde	7421-36-3	0.10	3.3
117. alpha-Chlordane	5103-71-9	0.5	1.7
118. gamma-Chlordane	5103-74-2	0.5	1.7
120. Aroclor-1016	12674-11-2	0.5	33.0
121. Aroclor-1221	11104-28-2	0.5	33.0
122. Aroclor-1232	11141-16-5	0.5	67.0
123. Aroclor-1242	53469-21-9	0.5	33.0
124. Aroclor-1248	12672-29-6	0.5	33.0
125. Aroclor-1254	11097-69-1	1.0	33.0
126. Aroclor-1260	11096-82-5	1.0	33.0

⁽¹⁾ Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

⁽²⁾ Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment on dry weight basis will be higher.

⁽³⁾ Medium Soil/Sediment Quantitation Limits (QL) for Pesticides/PCB compounds are 15 times the individual Low Soil/Sediment QL.

Based on the Contract Laboratory Program Statement of Work, OLM01.8 (8/91)

INORGANIC TARGET ANALYTE LIST (TAL)

Analyte	Detection Limit (ug/L -- water (1))
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Antimony	60
Arsenic	10
Barium	200
Beryllium	5
Cadmium	5
Calcium	5,000
Chromium	10
Cobalt	50
Copper	25
Iron	100
Lead	3
Magnesium	5,000
Manganese	15
Mercury	0.2
Nickel	40
Potassium	5,000
Selenium	5
Silver	10
Sodium	5,000
Thallium	10
Vanadium	50
Zinc	20
Cyanide	10

(1) Sediment detection limit 100x water (ug/kg--soil/sediment).

Based on the Contract Laboratory Program Statement of Work, ILM03.0
(3/92).